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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,494	10/18/2001	Gordon Kotora	C-439	7477
25900 7590 11/17/2004 SUN CHEMICAL COPORATION 222 BRIDGE PLAZA SOUTH FORT LEE, NJ 07024			EXAMINER SHOSHO, CALLIE E	
			ART UNIT 1714	PAPER NUMBER

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/982,494

Applicant(s)

KOTORA ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/23/02.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4-5, 7, 11, 14, 17, 19, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumar et al. (U.S. 6,541,109) taken in view of the evidence given by Tugukuni et al. (U.S. 4,122,055)

Kumar et al. disclose coating composition comprising ionically crosslinked polymers wherein the ionic crosslinking is between polymer with acid functional group such as carboxylic acid group and polymer with amino functional groups such as tri-substituted amine. The polymers include acrylic polymers and polyester. There is also disclosed a method of preparing the coating composition comprising providing the above polymers and then ionically crosslinking (col.3, lines 9-13, col.7, lines 9-11 and 39-52, col.8, lines 26-35, col.9, lines 39-51, col.11, lines 16-20 and 36-40, col.12, lines 30-50, and col.13, lines 33-42). The polymer with acid functional group is known under the tradename ASE-60 which is well known, as evidenced by Tugukuni et al. (col.16, line 12), to possess acid number of 250.

In light of the above, it is clear that Kumar et al. anticipate the present claims.

3. Claims 1-11 and 14-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al. (U.S. 5,180,782).

Stone et al. disclose ink comprising polyamide, based on mono- and diamines, possessing amine number greater than 80 and carboxylated polyester comprising carboxylic acid group that possesses acid number of 65-500. The carboxylated polyester is neutralized with amine or ammonia. There is also disclosed method of preparing the coating composition comprising providing the above polymers and then mixing (col.1, lines 6-12, col.2, lines 54-58, col.3, lines 15-18, 38-48, and 56-61, col.4, lines 50-54, and example 1). Although there is no disclosure that the polymers are ionically crosslinked or that mixing the polymers results in ionic crosslinking, given that Stone et al. disclose the use of combination of acid functional polymer and amino functional polymer as presently claimed, it is clear that the polymers would inherently ionically crosslink when brought into contact and mixed together.

In light of the above, it is clear that Stone et al. anticipate the present claims.

4. Claims 1, 4, 7, 11, 14, 19, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Harada et al. (U.S. 6,333,109).

Harada et al. disclose coating composition comprising ionically crosslinked polymers wherein the ionic crosslinking is between polymer with acid functional group such as carboxylic acid group and basic polymer with amino functional groups. The polymers include acrylic polymers. There is also disclosed a method of preparing the coating composition comprising

providing the above polymers and then ionically crosslinking (col.2, lines 13-16, col.4, lines 35-40, col.7, lines 41-45, col.7, line 66-col.8, line 5, and col.9, line 41-col.10, line 25).

In light of the above, it is clear that Harada et al. anticipate the present claims.

5. Claims 1, 4-9, 11, 14, 17-21, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Calhoun (U.S. 5,399,612).

Calhoun discloses coating composition comprising ionically crosslinked polymers wherein the ionic crosslinking is between polymer with acid functional group such as carboxylic acid group and amino functional siloxane polymer with amino functional groups such as tri-substituted amines. The acid functional polymer possesses acid number of 100-700 and is neutralized with volatile base such as amine. There is also disclosed a method of preparing the coating composition comprising providing the above polymers and then ionically crosslinking (col.1, lines 13-25, col.3, lines 3-5, col.4, lines 48-66, col.5, lines 20-36 and 54-58, col.6, lines 10-12 and 29-55, and col.7, lines 47-57).

In light of the above, it is clear that Calhoun anticipates the present claims.

6. Claims 1, 5, 7, 11-12, 14, 17, 19, and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Catena et al. (U.S. 5,658,968).

Catena et al. disclose ink comprising polyamide obtained from diamines and dimerized rosin possessing acid number of 140-150. There is also disclosed method of preparing the coating composition comprising providing the above polymers and then mixing (col.1, lines 5-8, col.2, lines 15-17, and col.2, line 54-col.3, line 6). Although there is no disclosure that the

polyamide and rosin are ionically crosslinked or that mixing the polymers results in ionic crosslinking, given that Catena et al. disclose the use of combination of acid functional polymer and amino functional polymer as presently claimed, it is clear that the polymers would inherently ionically crosslink when brought into contact and mixed together.

In light of the above, it is clear that Catena et al. anticipate the present claims.

7. Claims 1, 4-6, 11, 13-14, 17-18, 23, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Koike et al. (U.S. 2002/0025481).

Koike et al. disclose coating comprising diluent, acid functional polymer comprising carboxylic acid groups, and amino functional polymer. It is disclosed that the acid functional polymer possesses acid number of, for instance, 84. There is also disclosed method of preparing the coating composition comprising providing the above polymers and then mixing (paragraphs 15, 22-23, 27-28, 85, and example 4). Although there is no disclosure that the acid functional polymer and amino functional polymer are ionically crosslinked or that mixing the polymers results in ionic crosslinking, given that Koike et al. disclose the use of combination of acid functional polymer and amino functional polymer as presently claimed, it is clear that the polymers would inherently ionically crosslink when brought into contact and mixed together.

In light of the above, it is clear that Koike et al. anticipate the present claims.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

EP 191645 and Ozawa et al. (U.S. 5,725,961) each disclose coating composition comprising polymer complex of acidic polymer and basic polymer.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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